

Forbes

AMERICAN
PRODUCTIVITY

HOW
GOES
THE
BATTLE?

Special Report
The 100 largest U.S.
multinationals



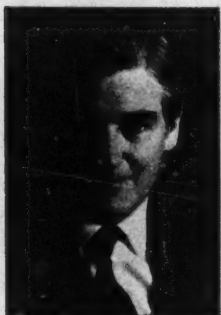
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JOSEPH McNALLY
SRI ACQUISITIONS
EAST WEST HWY
CN DC 20014

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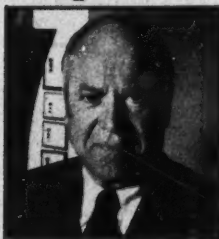
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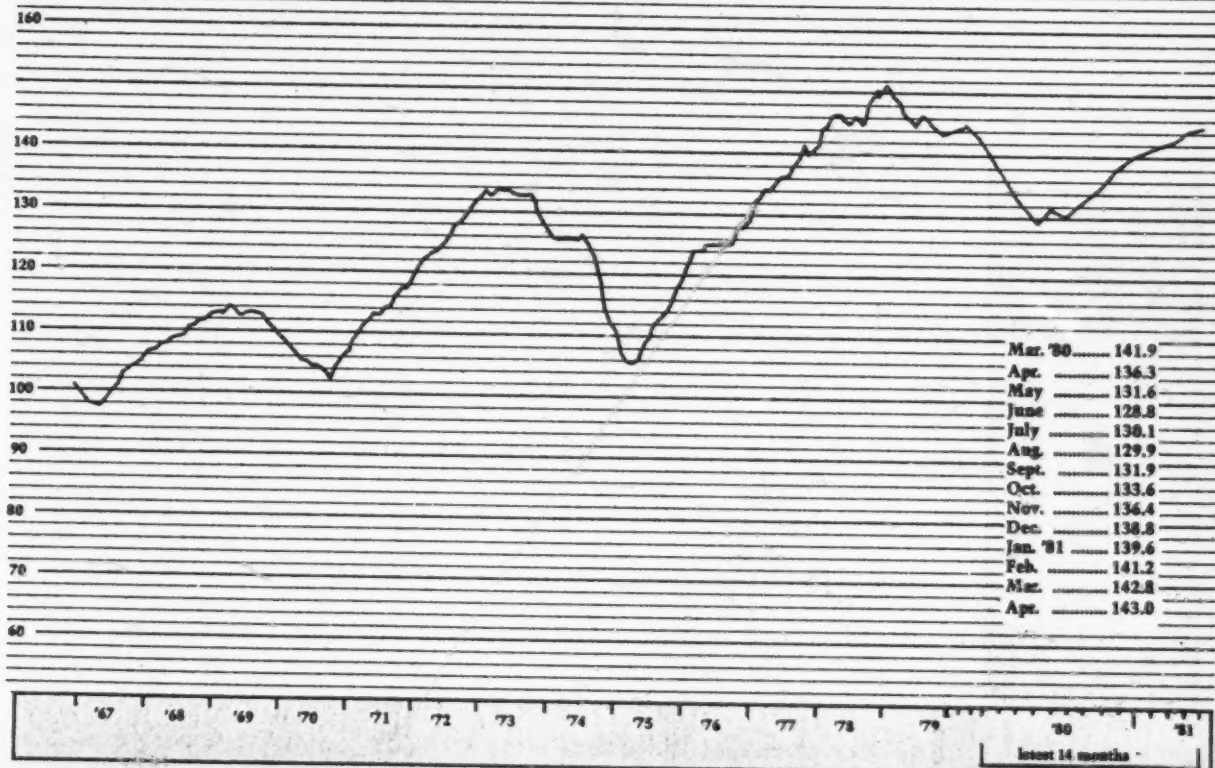
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The Forbes Index

Forbes Index



The Forbes Index Components

Is a downturn coming? The revised Forbes Index for April shows only a 0.1% increase, by far the smallest in eight months. The main reason: a 2.5% decline in the ratio of consumer loan borrowings to loan repayments. Total consumer debt, in fact, dropped by almost \$1 billion in the current reporting period. What kept the Index from turning down? A decline in the number of unemployment claims.

The Forbes Index is a measure of U.S. economic activity composed of eight equally weighted elements:

Total industrial production

New claims for unemployment compensation

The cost of services relative to all consumer prices

The level of new orders for durable goods compared with manufacturers' inventories

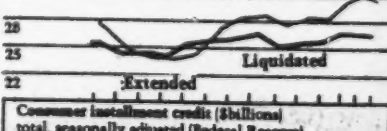
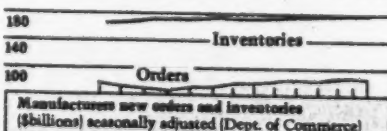
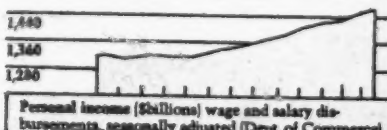
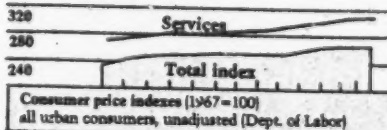
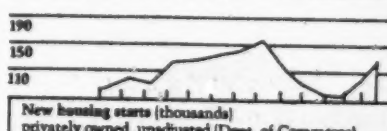
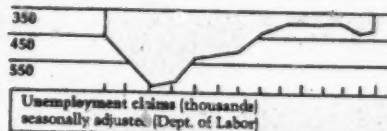
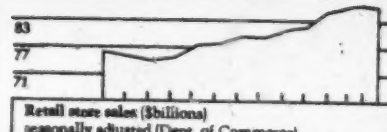
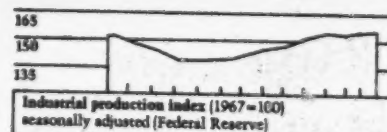
Total retail sales

New housing starts

Personal income

The change in the amount of consumer installment debt outstanding

To measure these eight elements, Forbes monitors 11 series of U.S. government data. The last 14 months' data for each series is presented at right.



New faces in an age of megadeals

The 100 largest foreign investments in the U.S.

Renault, the French automaker, acquires a 46% share in American Motors to jump from nowhere to the number 9 spot in *FORBES'* rankings of the 100 largest foreign investments in the U.S. Brascan Ltd., the Canada-based holding company controlled by the Bronfman family, ups its stake in Scott Paper to over 20%, propelling it, too, onto the list for the first time, in the number 14 position.

So it goes in an age of megadeals. Even if the U.S. dollar should remain strong vis-à-vis other currencies long after interest rates here decline, foreign appetites for investing in the U.S. are not likely to diminish. Their stake is already sizable. The 100 largest foreign investors in the U.S. listed on the following pages commanded—through outright ownership, control or

partial interests—\$179 billion in sales revenues last year, up 27% from 1979. Varying disclosure standards make it impossible to compile totals for profits and assets (note the number of “not available” entries), but it may be of some interest that the incomplete list of the top 100s’ assets in the U.S. totaled about \$170 billion last year, up 30%, and the incomplete profit total was approximately \$6.7 billion, up 34%.

Britain remains the most important home base for foreign investors in the U.S.; 27 of the top 100 investments involve U.K. firms. But the activity north of the border puts Canada in second place, with 18. West Germany is third with 16. Japan? Its largest U.S. investment is Matsushita Electric’s wholly owned U.S. distributor of Panasonic, which puts it 26th on the list.



The 100 largest foreign investments in the U.S.

Foreign investor	Country	U.S. company	% owned	Industry	Revenue (mill)	Assets (millions)
1 Anglo American Corp of So Africa Ltd ¹	So Africa	Engelhard Min & Chem ^{1, 2}	32%	diversified metals	\$ 532.7	\$ 6,301
<i>Minerals & Resources</i>	Bermuda	Inspiration Consol Copper	50	copper	178	199
<i>Hudson Bay MES¹</i>	Canada	Terra Chemicals Intl ¹	55	fertilizer	299	160
					27,047	
2 Royal Dutch/Shell Group ¹	Netherlands	Shell Oil Co ¹	69	oil	19,830	1,542.0
	UK	Scallop Corp	100	oil		
		Massey Coal Co	50	coal		
		Billiton Metals & Ores USA	100	metals		
		Ocean Minerals	43	metals	4,734 ³	NA
		General Atomic Co	50	nuclear		8,481 ³
					24,564 ³	
3 British Petroleum Ltd ¹	UK	Standard Oil Ohio ¹	53	energy	11,023	1,811.2
4 Tengelmann Group	Germany	Great A&P Tea ¹	50	supermarkets	6,990	-43.0
5 Friedrich Flick Group	Germany	WR Grace ¹	26	chemicals, multicompany	6,101	283.8
						4,365
6 Générale Occidentale SA	France	Grand Union	100	supermarkets	3,626 ³	34.3
		Diamond International ¹	29	packaging, lumber	1,283	40.6
					4,909	
7 B.A.T Industries Ltd ¹	UK	BATUS	100	paper, retailing, tobacco	3,700 ³	NA
		Germaine Monteil	100	cosmetics	500 ³	NA
					4,200 ³	
8 Beneficiaries of US Philips Trust	Netherlands	North American Philips ¹	62	electronics	2,658	74.5
9 Regie National des Usines Renault	France	American Motors Corp ¹	46	automobile	2,553	-197.5
10 Nestlé SA	Switzerland	Nestlé Co	100	food		1,029
		Cain's Coffee	100	coffee		
		Libby, McNeill & Libby	100	food		
		Stouffer Corp	100	food, restaurants	2,400 ³	NA
		Alcon Laboratories	100	drugs		NA
		Beech-Nut Foods Corp	100	baby foods		
11 Bayer AG	Germany	Mobay Chemical Corp	100	chemicals	1,070	54.1
		Miles Laboratories	100	health care	686	6.6
		Cutter Laboratories	100	health care	330	2.9
		Helena Chemical Co	100	chemicals	283	NA
		Haarmann & Reimer Corp	100	chemicals	19	NA
					2,388	
12 Unilever NV ¹	Netherlands	Lever Brothers Co	100	consumer goods	1,037	-16.9
		Thomas J Lipton Inc	100	food	798	42.8
		Natl Starch & Chemical	100	adhesives, starches	552	33.4
					2,367	
13 Petrofina SA	Belgium	American Petrofina Inc ¹	71	petroleum	2,098	104.3
		Finadel	100	petroleum	25	-0.6
					2,123	
14 Brascan Ltd ¹	Canada	Scott Paper ¹	21	paper products	2,083	133.5
15 Schlumberger NV ¹	Netherlands	Schlumberger Technology	100	oilfield services & elec	1,885 ³	450.0 ³
	Antilles	Fairchild Camera	100	semicond & test equip		1,438 ³
16 Hongkong & Shanghai Banking Corp ¹	Hong Kong	Marine Midland Banks ¹	51	banking	1,859	55.9
17 George Weston Ltd	Canada	Interbake Inc	100	biscuits		17,480
		Stroehmann Brothers Co	100	bakery	260 ³	NA
		Eastern Fine Paper	100	fine paper		NA
<i>Loblaw Companies</i>	Canada	Peter J Schmitt	87	wholesale food	378	NA
		National Tea Co	84	supermarkets	1,219	8.7
					1,857 ³	
18 Volkswagenwerk AG	Germany	Volkswagen of America	100	auto, auto parts	1,300	NA
		Triumph Adler Inc	100	business machines, information systems	500 ³	NA
					1,800 ³	

¹Publicly traded in U.S. ²Results are before spinoff of certain operations; name changed to Philbro Corp. ³Estimate. ⁴12½% owned by Anglo American Corp, which is ranked number 1. NA: Not available. Note: Some foreign investors listed own U.S. company indirectly through company in italics.

The 100 largest foreign investments in the U.S.



Foreign investor	Country	U.S. company	% owned	Industry	Revenue (millions)	Net income (millions)	Assets (millions)
19 Imperial Chemical Industries Ltd ¹	UK	Fiber Industries	38%	man-made fibers	\$940 ³	NA	\$501 ³
		ICI Americas Inc	100	drugs, chemicals	802	NA	NA
		Rubicon Chemicals Inc	50	chemicals	NA	NA	NA
		Corpus Christi Petrochemical Co	38	petrochemicals	NA	NA	NA
					1,742 ³		
20 Ciba-Geigy Ltd	Switzerland	Ciba-Geigy Corp	100	chemicals, drugs, consumer goods	1,700 ³	NA	1,300 ³
21 Canadian Pacific Ltd ¹	Canada	Soo Line Railroad ¹	56	railway	325	\$34.0	485
	Canada	Canadian Pacific Enterprises (U.S.) Inc	100	agric products, china, industrial minerals	1,363	34.2	417
22 Inco Ltd ¹	Canada	Inco ElectroEnergy	100	batteries, elec motors	856	NA	684
		International Nickel	100	primary metals	438	NA	76
		Huntington Alloys	100	metal products	327	NA	381
		other companies	100	various	42	NA	85
					1,663		
23 BASF AG ¹	Germany	BASF Wyandotte Corp	100	chemicals	1,010	-65.1	767
		Badische Corp	100	fibers, chemicals	453	16.9	328
		BASF Systems Corp	100	magnetic media	66	NA	NA
		Fritzsche Dodge & Olcott Inc	100	flavors/fragrances			
		Cook Industrial Coatings	50	automotive coatings	118	NA	NA
		Knoll Pharmaceutical Co	100	fine chemicals & drugs			
				1,647			
24 Cie Française des Pétroles	France						
Total Petroleum NA Ltd	Canada	Total Petroleum Inc	100	oil	1,567	NA	965
25 Hanson Trust Ltd ¹	UK	McDonough	100	footwear, cement, handtools	451	21.6	208
		Hygrade Food Products	100	meat processors	448	10.7	NA
		Interstate United	100	food service management	343	9.8	NA
		Hanson Industrial Services	100	specialty textiles	208	17.7	NA
		American Farm Products	100	fishing, agric prod	57	9.3	NA
				1,507			
26 Matsushita Electric Industrial Co Ltd ¹	Japan	Matsushita Electric Corp of America	100	electronics	1,500 ³	NA	NA
27 Canada Development Corp	Canada	Texasgulf Inc ¹	35	mining	1,090	286.5	2,010
		Polysar Ltd	100	petrochemicals	276	NA	118
		other companies	100	electronics, life sciences, oil, gas	34	NA	94
				1,400			
28 Alusuisse	Switzerland	Consolidated Aluminum	80	aluminum	928	20.0	517
		Maremont Corp	100	automotive parts	400 ³	NA	NA
		Lonza Inc	100	chemicals	NA	NA	NA
				1,328 ³			
29 Dalgety Ltd	UK	Dalgety Foods Inc	100	frozen foods			
		Martin-Brower Co	100	food distribution	1,300 ³	NA	208 ³
		Pig Improvement Co	100	pig breeding			
		Modern Maid	100	food coatings			
30 Hoechst AG ¹	Germany	American Hoechst	100	chemicals	1,290	-10.0	1,200
31 Seagram Co Ltd ¹	Canada	Joseph E Seagram & Sons	100	spirits, wines, oil, gas	1,286	115.0	2,249
32 Alcan Aluminium Ltd ¹	Canada	Alcan Aluminum Corp	100	aluminum	1,273	33.0	697
33 Thomas Tilling Ltd	UK	Thomas Tilling Inc	100	energy, medical supplies, electrical prod, other	1,209	35.0 ³	562 ³
34 Imperial Group Ltd ¹	UK	Howard Johnson Co	100	hotel & restaurants	551 ³	NA	NA
		Country Pride Foods	100	poultry, food supplier	627	NA	NA
		Lea & Perrins Inc	85	sauses	15	NA	NA
					1,193 ³		

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35 Pechiney Ugine Kuhlmann	France	Howmet Aluminum Corp	100%	aluminum products	\$549	\$102.0	\$668
		Howmet Turbine Components Corp	100	engine castings	643		
36 General Electric Ltd ¹	UK	Picker International	80	medical equipment sys	1,192	NA	NA
		AB Dick	100	office equipment	650	NA	NA
		Alco Power	100	diesel engines	448	NA	NA
					82		
37 Commercial Union Assurance Co Ltd	UK	Commercial Union Corp	100	insurance	1,180	41.1	2,139
38 Genstar Ltd ¹	Canada	Flintkote Company	100	building materials	1,179	NA	610
		Genstar Fincl Services	100	financial services	780	NA	528
		Genstar Pacific Corp	100	land/real estate			
		Genstar Properties	100	land/real estate			
		Genstar Conservation Systems Inc	100	building materials			
39 Thyssen AG ¹	Germany	Budd Co	100	automotive parts	1,138	NA	NA
40 Moore Corp Ltd ¹	Canada	Moore Business Forms	100	business forms	1,132	NA	604
		FN Burt Co	100	packaging	1,128		
41 Rhône-Poulenc SA	France	Morton-Norwich Products ¹	20	salt, food, chemicals	847	47.7	621
		Rhône-Poulenc Inc	100	chemicals, phototype-setting	225	NA	160
42 Delhaize-Le Lion SA	Belgium	Food Town Stores Inc ¹	52	supermarkets	1,072	15.3	106
		Alterman Foods Inc	100	supermarkets	544	0.1	69
					524		
43 Siemens AG ¹	Germany	Siemens Corp	100	medical & communications, electronics, components	1,068	NA	724
		Siemens-Allis Inc	50	power engring prods	587	NA	300
		Siecor Inc	50	telephone & fiber optical cables			
		General Numeric Corp	50	computer controls			
44 Hugo Mann	Germany	Fed-Mart ¹	88	department stores	1,067	-6.3	313
45 Royal Ins Co Ltd	UK	Royal Group	100	insurance	1,062	49.9	2,049
46 Akzo NV ¹	Netherlands	Akzona ¹	66	chemicals, fibers	1,054	4.9	847
47 BOC International ¹	UK	Airco	100	industrial gases	1,012	45.1	1,016
48 Grand Metropolitan ¹	UK	Liggett Group Inc	100	tobacco, drinks & foods	1,004	72.3	790
49 Sony Corp ¹	Japan	Sony Corp of America	100	consumer electronics	1,000	NA	550 ³
50 Mitsui & Co Ltd ¹	Japan	Alumax	45	aluminum	968	104.1	1,049
51 F Hoffmann-La Roche & Co Ltd	Switzerland	Hoffmann-La Roche Inc	100	drugs, chemicals	950 ³	NA	NA
52 Massey-Ferguson Ltd ¹	Canada	Massey-Ferguson Inc	100	farm & indust machinery	846	NA	1,045
		Perkins Engines Inc	100	diesel engines	101	NA	52
53 Saint-Gobain-Pont-à-Mousson ¹	France	CertainTeed Corp ¹	55	building supplies	947	0.3	694
54 Noranda Mines Ltd	Canada	Noranda Aluminum	100	aluminum	868	33.8	522
		Norandex	100	aluminum fabricating			
		Norandal	100	aluminum fabricating			
		Fraser Paper	65	paper mfr			
MacMillan Bloedel Ltd	Canada	MacMillan Bloedel Inc	100	forest products	175 ³	NA	250 ³
55 6 European banks	6 countries	European Amer Bancorp	100	banking	838	30.8	7,771
56 Consolidated Gold Fields Ltd ^{1,4}	UK	Azcon Corp	100	steel	823		
		ARC America Corp	100	concrete	447		
		Newconex Corp	100	drilling rigs	231		
		other companies	100	exploration, investments	125		
					12		
					815		254

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57 Nova <i>Husky Oil Ltd</i>	Canada Canada	Husky Oil Co Husky Industries Gate City Steel	100% 100 100	petroleum carbon & charcoal steel	\$628 56 98 782	\$22.1	\$620
58 Bank of Tokyo Ltd ¹	Japan	Bank of Tokyo Trust California First Bank ¹	100 74	banking banking	395 382 777	12.2 18.2	3,947 3,621
59 Trade Development Bank Holding	Luxembourg	Republic NY Corp ¹	61	banking	771	57.7	6,447
60 Thyssen-Bornemisza NV	Netherlands	Indian Head	100	diversified mfr	770 ³	NA	NA
61 Bowater Corp Ltd ¹	UK	Bowater North America Catawba Newsprint Co Bowater Computer Forms	100 51 100	lumber, pulp & paper lumber, pulp & paper lumber, pulp & paper	728	NA	NA
62 General Accident Fire & Life Ltd	Scotland	General Accident F&L Potomac Insurance Co Camden Fire Assurance Pennsylvania General Ins	100 100 100 100	insurance insurance insurance insurance			
62 Babcock Intl Ltd ¹	UK	Babcock International Inc	100	diversified mfr, engineered products	710	NA	473
64 Davy Corp Ltd	UK	Davy Inc	100	hvy constr & engineering	700 ³	NA	240 ³
65 AB Electrolux	Sweden	Dometic Inc	100	appliances	693	18.1	419
66 Standard Chartered Bank Group	UK	Union Bank	100	banking	681	32.2	7,004
67 Bell Canada <i>Northern Telecom Ltd</i>	Canada Canada	Northern Telecom Inc	100	telecommunications	675	NA	709
67 Beecham Group Ltd ¹	UK	Beecham Inc Jovan Inc	100 100	drugs, consumer products cosmetics & fragrances	675	NA	525
69 Franz Haniel & Cie	Germany	Scrivner Inc	100	wholesale/retail foods, dept stores	674	7.4	102
70 Sandoz Ltd	Switzerland	Sandoz United States Ex-Lax Pharmaceutical Co	100 100	foods, drugs, seeds, chemicals health care	639 26 665	-8.1 4.0 ³	512 41
71 Hoesch AG Hoogovens <i>Estel NV</i>	Germany Netherlands	Envirotech ¹ Beckley Coal Mining Co Rotek Inc	28 25 50	pollution control coal tools & machinery	578 53 ³ 28 ³ 659 ³	-15.1 7.0 ³ NA	381 57 ³ NA
72 Fiat SpA ¹	Italy	Fiat-Allis Bentley Laboratories ¹ Hesston Corp ¹	80 39 50	construction equipment medical devices agricultural equip	358 52 241 651	-50.9 4.4 0.5	222 44 167
73 Rio Tinto-Zinc Ltd ¹	UK	US Borax & Chemical Indal	100 57	chemicals building products	374 ³ 269 643	NA NA	NA 162
74 Ahold NV ¹	Netherlands	Bi-Lo	100	food retailing	618	NA	113
75 Northern Foods Ltd	UK	Bluebird Inc	80	meat products	600 ³	7.3	104
75 Telefonaktiebolaget	Sweden	Anaconda-Ericsson	50	telecommunication equip	600 ³	NA	NA

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The 100 largest foreign investments in the U.S.

Foreign investor	Country	U.S. company	% owned	Industry	Revenue (millions)	Net income (millions)	Assets (millions)
77 Ivaco Inc	Canada	Laclede Steel ¹	40%	steel	\$231	-\$0.8	\$147
		Atlantic Steel	100	steel			
		National Wire Products	60	steel			
		NY Wire Mills	100	steel			
		Niagara Lockport Inds	100	steel, machinery belts	328	NA	209
		Capitol Wire & Fence Co	100	steel			
		Florida Wire & Cable	80	wire & cable	40	2.0	NA
					599		
78 United Biscuits Ltd	UK	Keebler Co	100	baked goods	544	18.0	182
		Specialty Brands Inc	93	spices, salad dressings	53	4.0	21
					597		
79 Financière Crédit Suisse-First Boston	Switzerland	First Boston ¹	38	investment banking	579	33.6	6,021
80 National Westminster Bank Ltd	UK	National Bank of N Amer	100	banking	575	12.0	5,693
81 Nationale-Nederlanden NV	Netherlands	Life Ins Co of Georgia	100	insurance	251	24.8	1,055
		Peerless Insurance	81	insurance	131	7.8	186
		Security Life of Denver	97	insurance	63	6.1	254
		Midwestern United Life Ins	87	insurance	28	3.6	215
		Wisconsin National Life	100	insurance	32	3.9	134
		Netherlands Insurance	100	insurance	15	1.4	25
					520		
82 IBH Holding AG	Germany	Terex Corp	80	machinery, earthmoving equip	500 ³	NA	NA
83 TransCanada Pipelines ¹	Canada	Great Lakes Gas Transmission	50	gas pipeline	498	16.9	347
84 Allianz Versicherungs AG	Germany	Allianz of America Inc	52	insurance	374	NA	1,703
		Munich American Reinsurance	45	life insurance	96	3.8	248
		Munich American Reinsurance	45	property & casualty	24	0.6	41
					494		
85 Elf Aquitaine Group	France	Elf Aquitaine Inc	100	chemicals, oil, gas	298	0.2	281
		5 other companies	33-75	energy, drilling, plastic mfr, drugs	192	NA	NA
					490		
86 Willy Korf	Germany						
Coinvest BV	Germany		70				
Govt of Kuwait	Kuwait	Korf Industries	30	steel, technology	461	2.0	367
86 Imetal	France	Copperweld ¹	66	steel, copper fabrication	461	19.0	351
88 Tate & Lyle Ltd	UK	Tate & Lyle Inc	100	sugar refining, food	440	NA	NA
Redpath Inds Ltd	UK	Multi Fittings (USA) Ltd	100	pipes & fittings			
		Certain-Ted/Daymond	50	drainage pipe	21 ³	NA	12 ³
					461 ³		
89 Imasco Ltd	Canada	Hardee's Food Systems	100	fast food	433	15.2	210
		Shoppers Drug Mart	100	health & beauty products	13	NA	30
		Tinder Box Intl Ltd	100	tobacco products			
					446		
90 Hawker Siddeley Group Ltd ¹	UK	Lister Diesels	100	engine assembly	18	NA	NA
		Onan	37	engines	209 ³	NA	NA
		FASCO	100	electrical equipment	134	12.0	84
Carleton Inds Ltd	UK	KW Battery	100	industrial batteries	18 ³	0.7 ³	10 ³
Hawker Siddeley Canada	Canada	Corinth Machinery	100	sawmill equip, oil pumps	59	NA	37
		The Dosco Corp	100	mining machinery			
					438 ³		
91 BBC Brown, Boveri & Cie	Switzerland	BBC Brown, Boveri Co	100	mechanical & electric power equipment	425 ³	NA	NA
92 Empain-Schneider	France	Refinement Intl ¹	25	reclamation metals	238	3.9	195
		Phoenix Steel ¹	56	steel	176	0.7	141
					414		
93 L'Air Liquide ¹	France	Liquid Air Corp ¹	55	industrial gases	408	29.4	445
94 Barclays Bank Ltd	UK	Barclays American Corp	100	consumer finance			
		Barclays Bank of NY	100	banking	400 ³	NA	1,985
		Barclays Bank of Calif	100	banking			
							778
95 Fujitsu Ltd ¹	Japan	Amdahl ¹	25	computers	394	15.2	390

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The 100 largest foreign investments in the U.S.



Foreign investor	Country	U.S. company	% owned	Industry	Revenue (millions)	Net income (millions)	Assets (millions)
96 AB SKF	Sweden	SKF Industries Inc	96%	ball & roller bearings	\$384	\$12.0	\$272
97 Steinberg Inc ¹	Canada	Smitty's Super Valu Inc	100	supermarkets	373	9.7	81
98 Henkel KGaA	Germany	Henkel Corp	100	chemicals	307	NA	NA
		Amchem Products	100	chemicals	47	NA	NA
					354		
99 Molson Cos Ltd	Canada	Diversey Corp	100	chemicals	350	NA	NA
100 Solvay & Cie SA	Belgium	Soltex Polymer Corp	100	chemicals	345 ³	NA	NA

And the 25 runners-up

Foreign investor	Country	U.S. company	% owned	Industry	Revenue (millions)	Net income (millions)	Assets (millions)
101 COPERSUCAR	Brazil	Hills Bros Coffee	100%	coffee	\$325	NA	NA
101 IFI International SA	Luxembourg	Moog Automotive	100	automotive parts	325 ³	NA	NA
		Chicago Rawhide	100	automotive parts			
		River Cement	40	cement			
103 Dunlop Holdings Ltd ¹	UK	Dunlop Tire & Rubber	100	tires, sports equipment	322	NA	NA
104 Reed Intl Ltd ¹	UK	Reed Holdings Inc	100	paper, packaging	320 ³	\$17.0 ³	\$120 ³
105 DSM	Netherlands	Nipro Inc	100	chemicals	300 ³	NA	239
		Synres Chemical Corp	100	industrial chemicals	10 ³	NA	10
		Sheffield Plastics Inc	100	industrial plastics			
					310 ³		
106 Cominco Ltd ¹	Canada	Cominco American Inc	100	mining, fertilizers, electronic materials	292	NA	143
		Hawaiian Western Steel	51	steel	17	NA	6
					309		
107 Lloyds Bank Group	UK	Lloyds Bank California	100	banking	301	14.8	2,709
108 Heidelberger Zement	Germany	Lehigh Portland Cement	100	cement, furniture	300 ³	NA	NA
108 Robert Bosch GmbH	Germany	Robert Bosch	100	electronic equipment	300 ³	NA	NA
108 Olsen, Lehmkuhl families	Norway	Timex	100	watches	300 ³	NA	NA
111 Sanyo Electric Co Ltd ¹	Japan	Sanyo Manufacturing Corp	72	elec appliances	257	4.0	99
		Sanyo E&E Corp	60	elec appliances	38	-1.0	37
					295		
111 AGO Holding NV	Netherlands	Life Investors Inc ¹	39	insurance	295	17.0	753
113 Sun Life Assurance Co of Canada	Canada	Sun Life Assurance Co of Canada (US)	100	insurance	291	NA	2,000
114 Canadian Natl Rwys	Canada	Grand Trunk Corp	100	railroad	290	5.9	499
115 Ghaith Pharaon	Saudi Arabia	Sam P Wallace ¹	65	construction	283	3.9	83
116 BTR Ltd	UK	SW Industries	100	industrial manufacturing	277	33.0	395
117 Plessey Co Ltd ¹	UK	Plessey North America	100	electronics, metals	275 ³	NA	NA
118 Gardinier Family	France	Gardinier Big River	100	agricultural chemicals	270 ³	NA	NA
119 Racal Electronics Ltd ¹	UK	Racal-Milgo Inc	100	high speed modems	170 ³	NA	NA
		8 other companies	100	instruments, electronics, radios, marine radar	95 ³	NA	NA
					265		
120 Johnson & Matthey & Co Ltd	UK	Johnson Matthey Inc	100	refining & mechanical production	264	NA	NA
		Johnson Matthey Jewelry	100	jewelry manufacturing			
		The Meyercord Co	100	printing, transfers			
		Matthey Print Corp	100	transfers			
		Max Marx Color & Chem	100	chemicals			
121 Wellcome Fdn Ltd	UK	Burroughs Wellcome	100	drugs	262	NA	NA
122 Reckitt & Colman Ltd	UK	Reckitt & Colman NA	100	food	245 ³	NA	110 ³
123 Schering AG	Germany	ASAG Inc	100	chemicals, drugs	242	NA	234
124 Dumez Group	France	Cento Industries	42	construction	70	0.6	26
		Payne & Keller Corp	100	construction	160	0.8	42
					230		
125 Coats Patons Ltd ¹	UK	Coats & Clark Inc	100	textiles	220	NA	140

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The 100 largest U.S. multinationals

In this year's list of the 100 largest U.S.-based multinationals, the names of the top ten are familiar from 1980—but there were shifts in their relative rankings symptomatic of the times. Ford's 2.4% overseas sales decline knocked it from fourth to fifth place. General Motors' 3.9% decline still left it in sixth place. Gulf Oil, which had a 7% revenue slump, also fell a notch, even though foreign profits still managed to increase 11.4%.

Meanwhile, Engelhard Minerals' revenue gains fell from last year's delirious 92% to a merely handsome 27.5%—still enough to push it from tenth to eighth. In fact, though, that performance wasn't much above average: The top 25 firms averaged a

22.4% increase in foreign revenues.

The biggest change lower down on the list was Getty Oil, up 40 places, to 54th. Other major jumps served primarily as reminders of the furious pace in international finance. Chase and BankAmerica both saw foreign revenues up 34%; although their rankings remained the same. Chemical, Bankers Trust and Continental Illinois all climbed more than ten places in the standings, with revenue gains overseas averaging 44%.

As for the losers, recently shrunken Esmark, last year's number 88, is off the list entirely this year, as are Charter Co., Amerada Hess, Litton Industries and Uniroyal.



The 100 largest U.S. multinationals

Rank	Company	Foreign revenue (millions)	Total revenue (millions)	Foreign as % of total	Foreign operating profit* (millions)	Total operating profit* (millions)	Foreign as % of total	Foreign assets (millions)	Total assets (millions)	Foreign as % of total
1	Exxon	\$73,335	\$103,143	71.1%	\$3,878	\$6,243	62.1%	\$29,989	\$56,577	53.0%
2	Mobil	37,956 ¹	60,413 ¹	62.8	2,125 ²	2,813 ²	75.5	17,734	32,705	54.2
3	Texaco	35,116	51,196	68.6	1,407 ²	2,240 ²	62.8	14,732	26,430	55.7
4	Standard Oil Calif	22,603	40,479	55.8	1,246 ²	2,401 ²	51.9	10,282	22,140	46.4
5	Ford Motor	18,657	37,086	50.3	475 ²	-1,543 ²	P/D	13,682	24,335	56.2
6	General Motors	16,091	57,729	27.9	-688 ²	-763 ²	90.2	9,193	34,455	26.7
7	IBM	13,787	26,213	52.6	1,909 ²	3,562 ²	53.6	13,548	26,703	50.7
8	Engelhard Minerals	12,478 ¹	26,596 ¹	46.9	635	976	65.0	3,086	6,301	49.0
9	Intl Tel & Tel ³	12,344	23,819	51.8	1,157	1,788	64.7	11,698	28,378	41.2
10	Gulf Oil	10,330	26,483	39.0	657 ²	1,407 ²	46.7	6,612	18,638	35.5
11	Citicorp	9,110	14,211	64.1	307 ²	499 ²	61.5	67,949 ⁴	107,094 ⁴	63.4
12	Conoco	6,939 ¹	18,527 ¹	37.5	475 ²	1,026 ²	46.3	4,015	11,036	36.4
13	BankAmerica	6,344	12,075	52.5	292 ²	645 ²	45.3	44,311 ⁴	104,150 ⁴	42.5
14	General Electric	5,736 ¹	25,523 ¹	22.5	350 ²	1,514 ²	23.1	4,898	18,511	26.5
15	Occidental Petroleum	5,687 ¹	12,726 ¹	44.7	1,937	2,079	93.2	2,363	6,630	35.6
16	Dow Chemical	5,493	10,626	51.7	600	1,212	49.5	5,358	11,538	46.4
17	Chase Manhattan	5,081	8,003	63.5	179 ²	354 ²	50.6	40,141	76,190	52.7
18	Standard Oil Indiana	4,829 ¹	26,463 ¹	18.2	860 ²	1,915 ²	44.9	6,432	20,167	31.9
19	Eastman Kodak	4,036	9,734	41.5	448	1,896	23.6	3,017	8,747	34.5
20	El Du Pont de Nemours	3,865	13,652	28.3	267	1,340	19.9	2,268	9,560	23.7
21	Xerox	3,829	8,197	46.7	280 ²	619 ²	45.2	3,428	7,349	46.6
22	Goodyear	3,722	8,444	44.1	357	611	58.4	2,435	5,368	45.4
23	FW Woolworth ³	3,705	8,392	44.1	168 ⁶	300 ⁶	56.0	1,861	3,542	52.5
24	Safeway Stores	3,584	15,103	23.7	68 ²	119 ²	56.8	875	3,339	26.2
25	Procter & Gamble	3,493	10,772	32.4	149 ²	643 ²	23.2	1,750	6,553	26.7
26	JP Morgan	3,207	5,173	62.0	209 ²	342 ²	61.3	27,312	51,991	52.5
27	Union Carbide	3,149	9,994	31.5	423	1,292	32.7	2,882	9,659	29.8
28	Colgate-Palmolive	3,148	5,130	61.4	293	431	68.0	1,357	2,578	52.6
29	United Technologies	2,932	12,324	23.8	167 ²	393 ²	42.5	2,025	7,326	27.6
30	Tenneco	2,894	13,226	21.9	243	1,519	16.0	2,635	13,853	19.0
31	Pan Am World Airways	2,858	4,016	71.2	-3	-88	3.3	NA	3,366	NA
32	Dart & Kraft	2,830	9,412	30.1	257	808	31.8	1,355	4,650	29.1
33	Manufacturers Hanover	2,828	5,189	54.5	113 ²	229 ²	49.3	28,165	55,522	50.7
34	Sun Co	2,813 ¹	13,242 ¹	21.2	276 ⁷	849 ⁷	32.5	2,487	10,955	22.7
35	Phillips Petroleum	2,788	13,377	20.8	1,038	3,246	32.0	2,221	9,844	22.6
36	CPC International	2,737	4,120	66.4	216	389	55.5	1,577	2,328	67.7
37	Coca-Cola	2,641	5,913	44.7	565	862	65.5	1,409	3,406	41.4
38	Minn Mining & Mfg	2,524	6,080	41.5	451	1,199	37.6	1,737	5,046	34.4
39	Atlantic Richfield	2,443	23,744	10.3	52 ²	1,651 ²	3.1	1,109	16,605	6.7
40	Union Oil California	2,333 ¹	10,052 ¹	23.2	140 ⁸	1,221 ⁸	11.5	870	6,772	12.8

*Unless otherwise indicated. ¹Includes other income. ²Net income. ³Includes proportionate interest in unconsolidated subsidiaries or investments. ⁴Average assets. ⁵Income before security gains or losses. ⁶Excluding equity in FW Woolworth & Co Ltd. ⁷Profit before interest and after taxes. ⁸Pretax income. ⁹Excludes international transportation. ¹⁰Estimate. ¹¹Excludes Canada. ¹²Includes equity in earnings of associated companies. ¹³From continuing operations. P/D: Profit over deficit. NA: Not available. D/P: Deficit over profit. NM: Not meaningful.

The 100 largest U.S. multinationals



Rank	Company	Foreign revenue (millions)	Total revenue (millions)	Foreign as % of total	Foreign operating profit* (millions)	Total operating profit* (millions)	Foreign as % of total	Foreign assets (millions)	Total assets (millions)	Foreign as % of total
41	Johnson & Johnson	\$2,204	\$4,837	45.6%	\$397	\$713	55.6%	\$1,525	\$3,343	45.6%
42	American Brands	2,190	4,277	51.2	217	783	27.7	1,409	3,971	35.5
43	Intl Harvester	2,187	6,312	34.6	86	-262	P/D	1,492	5,843	25.5
44	Chemical New York	2,116	4,282	49.4	67 ⁵	175 ⁵	38.1	17,465	41,342	42.2
45	Monsanto	2,109	6,574	32.1	-7	210	D/P	1,494	5,796	25.8
46	Chrysler	2,076	9,225	22.5	-136	-1,710	8.0	1,481	6,618	22.4
47	Beatrice Foods	2,068	8,773	23.6	144	714	20.2	1,094	4,237	25.8
48	Bankers Trust New York	2,042	3,693	55.3	104 ²	214 ²	48.6	16,413	34,202	48.0
49	RJ Reynolds Inds	2,027	8,449	24.0	136 ⁹	1,269	10.7	1,122 ⁹	7,355	15.3
50	General Tel & Elec ¹³	1,896	9,979	19.0	74 ²	478 ²	15.5	3,285	19,720	16.7
51	Sperry	1,895	4,785	39.6	272	658	41.4	1,877	4,262	44.0
52	Sears, Roebuck ³	1,889	26,139	7.2	30 ²	554 ²	5.4	1,397	28,431	4.9
53	Caterpillar Tractor	1,845	8,598	21.5	71	1,053	6.7	1,163	6,098	19.1
54	Getty Oil	1,841	10,150	18.1	1,212	2,411	50.3	1,879	8,267	22.7
55	Continental Illinois	1,828	4,716	38.8	74 ²	226 ²	32.7	15,600 ¹⁰	42,089	37.1
56	NCR	1,823	3,322	54.9	249	526	47.3	1,581	3,366	47.0
57	Firestone	1,790	4,850	36.9	98	3	NM	1,154	3,119	37.0
58	Halliburton	1,755	8,327	21.1	245	847	28.9	1,733	4,724	36.7
59	Trans World	1,751	5,018	34.9	83	126	66.0	863	3,185	27.1
60	Pfizer	1,721	3,029	56.8	306	495	61.9	1,631	3,364	48.5
61	Fluor	1,701	4,826	35.3	94	267	35.4	493	1,705	28.9
62	RCA	1,688	8,011	21.1	110 ⁸	507 ⁸	21.7	999	7,146	14.0
63	Continental Group ³	1,684	5,657	29.8	102	396	25.7	810	5,321	15.2
64	First Chicago	1,654	3,415	48.4	-6 ²	63 ²	D/P	12,395	28,699	43.2
65	General Foods	1,620	5,960	27.2	65	505	13.0	979	2,979	32.9
66	Deere	1,619	5,470	29.6	8	454	1.8	1,280	5,202	24.6
67	Warner-Lambert	1,593	3,479	45.8	265	564	47.0	1,172	2,954	39.7
68	American Express	1,585	5,504	28.8	9 ⁹	534	18.5	8,081	19,709	41.0
69	Hewlett-Packard	1,574	3,099	50.8	209 ⁸	523 ⁸	40.0	718	2,337	30.7
70	WR Grace	1,570	6,101	25.7	273 ⁸	687 ⁸	39.7	840	4,365	19.2
71	Allied Corp	1,531	5,519	27.7	190 ²	289 ²	65.7	1,147	4,538	25.3
72	Consolidated Foods	1,509	5,343	28.2	124 ⁸	265 ⁸	46.6	853	2,263	37.7
73	Honeywell	1,509	4,925	30.6	188	525	35.9	1,155	3,893	29.7
74	TRW	1,454	4,984	29.2	156	482	32.4	986	2,855	34.5
75	American Home Products	1,435 ¹	4,074 ¹	35.2	251	854	29.4	723	2,370	30.5
76	Gillette	1,401 ¹¹	2,315	60.5	150 ¹¹	278	54.1	1,080 ¹¹	1,709	63.2
77	Texas Instruments	1,397	4,075	34.3	120 ²	212 ²	56.6	778	2,414	32.2
78	K mart ³	1,378	14,830	9.3	24 ²	261 ²	9.1	544	6,567	8.3
79	Merck	1,354	2,734	49.5	278	651	42.8	1,177	2,866	41.1
80	PepsiCo	1,335	5,975	22.3	132	631	20.9	1,056	3,418	30.9
81	First National Boston	1,334	2,333	57.2	22 ²	102 ²	21.6	7,164 ⁴	15,384 ⁴	46.6
82	Bendix	1,306	3,862	33.8	114	349	32.6	828	2,924	28.3
83	Marathon Oil	1,277	8,180	15.6	6 ²	379 ²	1.5	1,755	5,043	34.8
84	American Intl Group	1,271	2,710	46.9	228	377	60.6	2,841	6,900	41.2
85	Gulf & Western Inds ³	1,270	6,885	18.4	170	477	35.7	1,700 ¹⁰	11,000 ¹⁰	15.5
86	Burroughs	1,267 ¹	2,902 ¹	43.7	147	273	54.0	1,588	3,855	41.2
87	American Standard	1,267	2,674	47.4	199	314	63.4	644	1,578	40.8
88	Avon Products	1,258	2,569	49.0	205	440	46.5	696	1,571	44.3
89	International Paper	1,254	5,043	24.9	155	426	36.4	811	5,197	15.6
90	Standard Brands	1,252	3,018	41.5	91	239	38.0	724	1,608	45.0
91	American Cyanamid	1,230	3,454	35.6	175 ¹²	335 ¹²	52.2	840	2,917	28.8
92	Ralston Purina	1,221	4,886	25.0	30	363	8.3	433	2,247	19.3
93	Singer	1,210	2,787	43.4	99	150	66.1	738	1,529	48.2
94	HJ Heinz	1,201	2,925	41.1	91	255	35.5	761	1,954	38.9
95	Scott Paper ³	1,185	3,268	36.3	44 ²	134 ²	33.1	988	2,748	36.0
96	Motorola	1,183	3,099	38.2	78	373	21.0	568	2,112	26.9
97	Bristol-Myers	1,154	3,158	36.6	188	544	34.6	795	2,109	36.0
98	Westinghouse Electric	1,126	8,514	13.2	103	652	15.8	729	6,813	10.7
99	Philip Morris	1,118	7,328	15.3	130	1,300	10.0	1,390	7,366	18.9
100	Ingersoll-Rand	1,109	2,971	37.3	127	393	32.2	948	2,527	37.5

*Unless otherwise indicated. ¹Includes other income. ²Net income. ³Includes proportionate interest in unconsolidated subsidiaries or investments. ⁴Average assets. ⁵Income before security gains or losses. ⁶Excluding equity in FW Woolworth & Co Ltd. ⁷Profit before interest and after taxes. ⁸Pretax income. ⁹Excludes international transportation. ¹⁰Estimate. ¹¹Excludes Canada. ¹²Includes equity in earnings of associated companies. ¹³From continuing operations. P/D: Profit over deficit. NA: Not available. D/P: Deficit over profit. NM: Not meaningful.

The 100 largest foreign companies

Once again, FORBES' list of the 100 largest foreign companies is headed by four oil producers and the six huge Japanese trading enterprises. New to the top ten, though, are Italy's ENI Group—now 8th on the list—and France's TOTAL Group, now 10th.

Oil and natural resource prices also meant higher international prominence for other major nationalized oil concerns. Petróleos de Venezuela now outranks such European luminaries as Philips Lamp, Volkswagen and Siemens—in 15th place, it is now the

largest Third World firm. Petróleos Mexicanos with an 80.3% sales gain, also moved up sharply, from 53rd on last year's listing to 32nd.

How do the top ten foreign firms compare in size to FORBES' U.S. sales ranking? While Exxon still dominates any combined list, Royal Dutch/Shell is second, with Mobil and GM following. After that, however, the growing impact of foreign businesses becomes even clearer: They make up 10 of the world's 25 largest companies, and 8 of the top 15.

The 100 largest foreign companies

Company	Fiscal year end	Revenue ¹ (millions)	Net income (millions)	Assets (millions)	Market value of common ² (millions)	Corporate headquarters	Industry	Employees (thousands)
1 Royal Dutch/Shell Group	Dec	\$77,140	\$5,176	\$68,404	\$25,563 ³	UK/Netherlands	energy	161.0
2 Mitsubishi Corp	Mar	55,183	183	19,647	3,857	Tokyo, Japan	wholesaler	13.0
3 British Petroleum Ltd	Dec	48,052	3,338	38,997	15,901	London, UK	energy	118.2
4 Mitsui & Co, Ltd	Mar	46,531	124	20,512	1,497	Tokyo, Japan	wholesaler	13.0
5 C Itoh & Co, Ltd	Mar	39,986	143	13,936	1,450	Tokyo, Japan	wholesaler	10.0
6 Marubeni Corp	Mar	38,051	75	13,698	1,558	Osaka, Japan	wholesaler	10.1
7 Sumitomo Corp	Mar	33,320	119	9,028	1,050	Osaka, Japan	wholesaler	10.0
8 ENI Group	Dec	27,112	NA	25,353 ⁴	none ⁵	Lazio, Italy	energy	122.6
9 Nissho-Iwai Co, Ltd	Mar	26,702	37	8,600	820	Tokyo, Japan	wholesaler	7.9
10 TOTAL Group (Française des Pétroles)	Dec	23,910	946	16,279	1,479	Paris, France	energy	48.1
11 Unilever	Dec	23,615	659	13,216	3,835 ³	Netherlands/UK	consumer goods	300.0
12 VEBA Group	Dec	21,972	210	14,080	2,236	Duesseldorf, Germany	energy	83.9
13 Fiat Group	Dec	21,178	60	18,000	1,172	Turin, Italy	automotive	342.7
14 Renault Group	Dec	18,955	185	12,385	none ⁵	Boul.-Billancourt, Fr	automotive	231.7
15 Petróleos de Venezuela SA	Dec	18,819	3,451	19,337	none ⁵	Caracas, Venezuela	energy	37.7
16 NV Philips Lamp	Dec	18,377	165	18,618	1,192	Eindhoven, Neth	elec equip	376.9
17 Volkswagen Group	Dec	18,313	171	12,647	1,921	Wolfsburg, Germany	automotive	257.9
18 Elf Aquitaine Group	Dec	18,150	1,376	19,935	5,218	Paris, France	energy	45.0
19 National Iranian Oil Co	Dec	18,000E	NA	NA	none ⁵	Tehran, Iran	energy	NA
20 Siemens Group	Sept	17,941	332	17,811	4,962	Munich, Germany	elec equip	344.0
21 P.S.A. Peugeot-Citroën ⁴	Dec	17,114	254	12,266	346	Paris, France	automotive	289.8
22 Daimler-Benz Group	Dec	17,084	604	8,773	3,649	Stuttgart, Germany	automotive	183.4
23 BASF Group	Dec	16,499	197 ⁶	9,332 ⁶	2,535	Ludwigshafen, Ger	chemicals	116.5
24 Hoechst Group	Dec	16,457	252	12,421	2,458	Frankfurt, Germany	chemicals	186.9
25 Bayer Group	Dec	15,858	356	13,553	2,349	Leverkusen, Germany	chemicals	181.6
26 INI-Instituto Nacional de Industria	Dec	15,397	-943	27,387	none ⁵	Madrid, Spain	multicompany	256.2
27 Thyssen Group	Sept	15,228	62	9,500	859	Duisberg, Germany	steel	151.7
28 Électricité de France	Dec	15,000	20	45,793	none ⁵	Paris, France	utility	108.9
29 Toyota Motor Sales Co	Mar	14,963	151	4,609	1,032	Nagoya, Japan	wholesaler	5.2
30 Petróleo Brasileiro SA	Dec	14,836	767	13,490	532	Rio de Janeiro, Brazil	energy	64.8
31 Nestlé	Dec	14,615	408	10,279	3,955	Vevey, Switzerland	food	152.7
32 Petróleos Mexicanos	Dec	14,579	NA	NA	none ⁵	Mexico City, Mexico	energy	100.0
33 Nissan Motor Co, Ltd	Mar	14,383	462	9,304	5,581	Tokyo, Japan	automotive	59.3 ⁶
34 Toyota Motor Co, Ltd ⁶	June	14,178	615	7,921	6,511	Toyota City, Japan	automotive	47.1
35 Deutsche Bundesbahn	Dec	14,023	-2,096	50,896 ⁴	none ⁵	Frankfurt, Germany	transportation	344.7
36 Imperial Chemical Ind Ltd	Dec	13,295	-47	14,510	4,582	London, UK	chemicals	143.2
37 Kanematsu-Gosho Ltd	Mar	13,190	2	4,916	194	Tokyo, Japan	wholesaler	3.9
38 Toyo Menka Kaisha, Ltd	Mar	13,150	11	4,326	287	Osaka, Japan	wholesaler	4.5
39 Nippon Steel Corp	Mar	13,056	495	13,810	4,611	Tokyo, Japan	steel	71.7 ⁶
40 Hitachi, Ltd	Mar	12,823	502	12,438	4,317	Tokyo, Japan	elec equip	143.3
41 Matsushita Electric Industrial Co, Ltd	Nov	12,713	543	11,437	5,913	Osaka, Japan	elec equip	107.1
42 The Electricity Council	Mar	12,523	81	18,901	none ⁵	London, UK	utility	158.8
43 Nippon Oil Co, Ltd	Mar	12,159	99	5,669	4,458	Tokyo, Japan	energy	11.6

¹Revenue is for "group" or consolidated and excludes excise taxes and duties. ²As of Dec. 31, 1980. ³Combined market value. ⁴Figures for year ended Dec. 31, 1979. ⁵Government, privately owned or cooperative. ⁶Not fully consolidated. NA: Not available. E: Estimated.
General Notes: Revenue and net income are converted at an average rate of exchange for the fiscal year; assets are converted at rate of exchange at fiscal year-end. Figures for 1980 were used for those March fiscal-year companies for which 1981 results were not available at press time.

The 100 largest foreign companies



Company	Fiscal year end	Revenue ¹ (millions)	Net income (millions)	Assets (millions)	Market value of common ² (millions)	Corporate headquarters	Industry	Employees (thousands)
44 B.A.T Industries Ltd	Dec	\$11,900E	\$549	\$ 9,678	\$2,098	London, UK	multicompany	177.0
45 Nichimen Co, Ltd	Mar	11,434	11	3,682	253	Osaka, Japan	wholesaler	3.4
46 Barclays Bank Group	Dec	11,301	810	88,476	2,919	London, UK	banking	116.0
47 Crédit Lyonnais Group	Dec	11,101	102	103,261	333	Paris, France	banking	45.9*
48 CAMPSA	Dec	11,087	30	2,034	48	Madrid, Spain	energy	9.8
49 Osterreichische Industrie Verwaltungs AG	Dec	11,053	9	4,803*	none ⁵	Vienna, Austria	metals	114.7
50 Banque Nationale de Paris Group	Dec	11,008	212	108,200	466	Paris, France	banking	49.0
51 Mitsubishi Heavy Ind, Ltd	Mar	10,997	101	13,385	2,404	Tokyo, Japan	indl machinery	95.3
52 ENEL	Dec	10,657	-1	NA	none ⁵	Rome, Italy	utility	116.4
53 National Westminster Bk	Dec	10,629	721	82,447	2,166	London, UK	banking	80.0
54 Cie Générale d'Électricité	Dec	10,400E	75E	6,909*	569	Paris, France	elec equip	172.0
55 Idemitsu Kosan Co, Ltd	Mar	10,367	1	8,058	none ⁵	Tokyo, Japan	energy	9.9
56 St-Gobain-Pont-à-Mousson	Dec	10,291	215	9,399	985	Paris, France	building prods	163.5
57 Tengelmann Group	June	10,200E	NA	NA	none ⁵	Muelheim, Germany	retailer	30.0
58 RWE Group	June	10,194	229	12,775	3,105	Essen, Germany	energy	68.0
59 British National Oil Co	Dec	10,055	205	2,859	none ⁵	Glasgow, Scotland	energy	1.7
60 Petrofina SA	Dec	9,745	323	7,339	2,147	Brussels, Belgium	energy	23.0
61 NV Nederlandse Gasunie	Dec	9,581	40	2,787	none ⁵	Groningen, Neth	energy	1.7
62 Deutsche Bank Group	Dec	9,120	242	89,123	3,190	Frankfurt, Germany	banking	44.1
63 Société Générale Group	Dec	9,113	188	90,794	734	Paris, France	banking	44.4
64 Montedison Group	Dec	9,085	-1	10,346	394	Milan, Italy	chemicals	105.5
65 Ruhrkohle	Dec	9,035	17	6,596	none ⁵	Essen, Germany	mining	136.8
66 Pechiney Ugine Kuhlmann	Dec	9,018	144	7,586	505	Paris, France	metals	89.1
67 Tokyo Electric Power Co ⁶	Mar	8,865	-146	22,698	4,777	Tokyo, Japan	utility	39.2
68 Le Groupe Thomson	Dec	8,646	NA	8,174*	316	Paris, France	elec equip	131.5
69 Gutehoffnungshütte Group	June	8,606	48*	5,926*	709	Oberhausen, Germany	industrial equip	86.1
70 Canadian Pacific Ltd	Dec	8,539	499	10,914	2,609	Montreal, Canada	multicompany	121.5
71 Toshiba Corp	Mar	8,296	191	7,920	2,445	Kawasaki, Japan	elec equip	98.0
72 National Coal Board	Mar	8,158	-347	7,041	none ⁵	London, UK	energy	297.0
73 Kansai Electric Power Co ⁶	Mar	8,153	440	16,837	3,225	Osaka, Japan	utility	23.9
74 AEG-Telefunken Group	Dec	8,077	-164*	4,326*	475	Frankfurt, Germany	elec equip	138.1
75 SNCF	Dec	8,045	-159	19,372*	none ⁵	Paris, France	transportation	250.0
76 Empain-Schneider ⁴	Dec	7,921	2	NA	112	Paris, France	industrial equip	123.0
77 Brit'ish Gas Corp	Mar	7,663	446	6,527	none ⁵	London, UK	utility	104.4
78 Friedrich Krupp Group	Dec	7,657	34	4,933	none ⁵	Essen, Germany	steel	85.7
79 Bank Hapoalim B.M.	Dec	7,633	125	17,004	880	Tel Aviv, Israel	banking	9.3
80 Honda Motor Co, Ltd	Feb	7,596	420	4,674	1,863	Tokyo, Japan	automotive	38.5
81 Crédit Agricole	Dec	7,554*	368	106,646	none ⁵	Paris, France	banking	65.5
82 Dunlop Pirelli Union	Dec	7,514	NA	NA	none ⁵	London, UK	automotive	151.0
83 NV DSM	Dec	7,504	13	4,555	none ⁵	Heerlen, Netherlands	chemicals	31.4
84 Michelin Group	Dec	7,325	72	8,467	597	Clermont-Ferrand, Fr	automotive	133.0E
85 Mannesmann Group	Dec	7,212	96	4,866	1,228	Duesseldorf, Germany	industrial equip	103.5
86 Rhône-Poulenc Group	Dec	7,146	-461	6,573	438	Paris, France	chemicals	95.0
87 Ciba-Geigy Ltd	Dec	7,113	182	10,027	2,085	Basle, Switzerland	chemicals & drugs	81.2
88 ESTEL NV	Dec	7,036	-246	4,960	213 ³	Nijmegen, Neth	steel	77.5
89 Finsider Group ⁴	Dec	6,933	-322	13,642	214	Rome, Italy	steel	110.6
90 Cie Financière Paribas	Dec	6,788	173	52,647	889	Paris, France	banking	26.0
91 British Steel Corp	Mar	6,772	-1,189	7,439	none ⁵	London, UK	steel	166.4
92 Suez Group	Dec	6,714	207	57,680	626	Paris, France	banking	36.3
93 BL Limited	Dec	6,693	-1,246	5,421	1,124	London, UK	automotive	157.5
94 General Electric Co Ltd	Mar	6,556	546	6,515	7,943	London, UK	elec equip	188.0
95 Rio Tinto-Zinc Corp Ltd	Dec	6,504	387	9,016	2,433	London, UK	metals	65.8
96 Robert Bosch Group	Dec	6,500E	100E	4,433*	none ⁵	Stuttgart, Germany	automotive	121.6
97 Maruzen Oil Co, Ltd	Mar	6,445	-1	4,417	827	Osaka, Japan	energy	6.1
98 Karstadt Group	Dec	6,277	NA	2,578*	724	Essen, Germany	retailer	84.2
99 Akzo Group	Dec	6,264	-35	4,513	236	Arnhem, Netherlands	chemicals	83.1
100 Royal Bank of Canada	Oct	6,221	301	52,294	2,039	Montreal, Canada	banking	36.9

¹Revenue is for "group" or consolidated and excludes excise taxes and duties. ²As of Dec. 31, 1980. ³Combined market value. ⁴Figures for year ended Dec. 31, 1979.

⁵Government, privately owned or cooperative. ⁶Not fully consolidated. NA: Not available. E: Estimated.

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There are roughly 1.2 million computers in operation in the U.S., and by 1985 there will be 5.4 million, or one for every 42 of us. Who—or what—is going to program them all?

The growth industry's growth industry

By Harold Seneker

IN 15 YEARS, computer services—the programming and software, not the hardware—has whirled up out of almost nothing into an industry larger than broadcasting. But even at \$13 billion annual revenues it still appears to be in its infancy—4,000 or so separate businesses, all growing like weeds. Many trade at 20 and 30 times earnings on the public markets. The stocks respond violently to every little twitch in the marketplace. Since Wall Street gets just as enthusiastic over pyrites like CB radios as it does over real gold, it makes sense to look deeper than the analysts' recommendations and ask, what is this phenomenon? Where is it going to become important?

Consider a reel of magnetic tape. Wholesale cost when blank, about \$50. But this one is worth \$50,000. Reason: The magnetically encoded program on it would take something like 20 man-years of programmer time, at \$20,000 to \$50,000 per man-year, to create from scratch. At \$50,000, then, that reel of tape is a bargain. Little wonder that the packaged software segment of the \$13 billion computer services industry was already a \$3 billion business last year and, according to International Data Corp., the Massachusetts research firm, is growing at 30% a year. In 1985, at that rate, packaged software would reach \$11 billion.

Or consider a service company with software or a data base, sending an-

swers over telephone lines from its computer to a terminal on your desk. Priced at, say, \$50 an hour, that may be an even greater bargain. Remote computer services are a \$4.5 billion business, growing at 21% per year. There is also the rather commonplace service called batch processing—taking a company's paperwork, key-punching it and processing it with nonproprietary software. It's a \$2.5 billion business (although obsolescent and expected to be almost static by the end of the decade). The companies that do it are mostly small—clear candidates for bigger operators who want to expand their customer base.

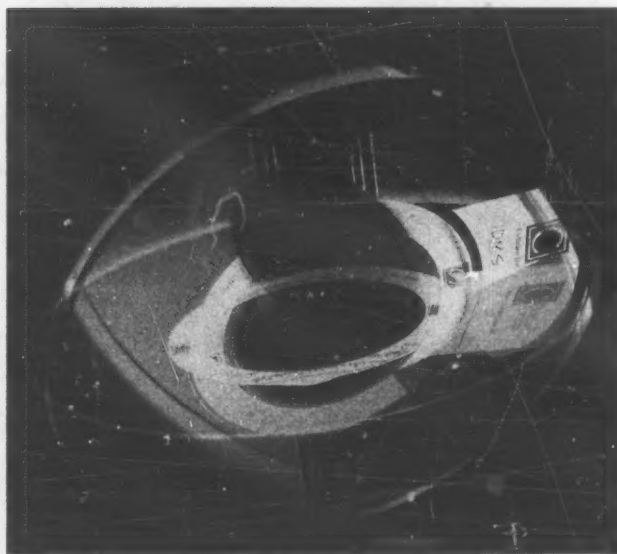
Altogether, these three segments of the computer services industry—based on software, not hardware—are a good part of the future of computers themselves. "I call them leveraged software companies," says Esther Dyson, computer services analyst at Oppenheimer & Co. "They distribute

the cost of programming and development over a large base of users and thereby are cost-effective far beyond the capabilities of most of their customers." What she means is: They can do it cheaper than their customers can do it themselves.

Most companies of any size with a computer of any size have their own EDP departments and their own programmers, of course. But programmers, the human part of the software equation, are in short supply. And the situation will get worse. There are about 500,000 computer specialists in the U.S. right now but the

number of computers is growing so fast the number of people can't keep pace. Programming is a peculiar skill combining flashes of creative intuition with endless hours of detail. Not everyone has the temperament for it. Then there is the "do-it-yourself" trend. "There are about 660,000 desktop computers out there now," points out International Data analyst Carol Weismann. By 1985 there will be 4 million, and the people who use those computers will be untrained laymen. So even greater amounts of information must be programmed into the machine to make it usable.

As in every other part of the computer industry, IBM is also the biggest factor in software—but as a sideline. IBM provides over \$1 billion worth of software a year to supply the \$26 billion worth of computers and office equipment it sells or leases. In a sense, IBM invented computer services years ago by providing batch process-



The top 20 in computer services

Providing software and services to computer users has exploded into a \$13 billion business. Here are the 20 largest players, ranked by their 1980 revenues as reported by Gartner Group, a leading research firm. Merrill Lynch assisted with the "main service area" information. As defined by Gartner Group, services noted in the table include: processing (1), custom/contract software (2), remote computing services (3), batch services (4) and facilities management (5).

Company	Main service area	Revenues (millions)	As % of total revenues	% change in revenues 1979-80
IBM	2	\$2,414.5	9.2%	21.9%
Control Data	3,4	722.7	19.0	18.6
Computer Sciences Corp	2	560.3	100.0	34.9
ADP	3,4	505.0	100.0	24.1
EDS	5	408.5	98.7	31.1
Honeywell	3	349.7	7.1	21.0
General Electric (GEISCO)	3	299.3	1.2	19.3
Tymshare	3	211.0	89.5	19.7
System Development Corp*	2,5	186.8	100.0	14.6
McDonnell Douglas (McAuto)	3	160.7	2.6	-21.9
Bradford National Corp	4	142.7	100.0	18.8
Planning Research Corp	2	127.4	41.5	24.5
Informatics Inc	1,2	125.9	100.0	12.0
Boeing Computer Services	3,4	125.0	1.3	30.2
Burroughs Corp	2	123.9	4.3	26.8
General Instrument	2	115.3	14.0	15.2
United Telecommunications	3	115.1	6.0	20.0
Shared Medical Systems	2	105.6	99.1	28.3
Wyly Corp	3	99.0	84.0	13.6
TRW	1,5	94.2	1.9	32.7

*Acquired by Burroughs Corp., Jan. 5, 1981.

Source: Gartner Group; Merrill Lynch

ing, until it had to transfer what was then only a backwater to Control Data as part of an antitrust settlement in 1973 and to agree to stay out for six years. Now free to return, IBM has already announced it will.

The competition promises to be interesting—and tough. Says Control Data's Robert Duncan: "Lots of competitors we see today will not be

around, or be important, because the companies like Control Data who make [an investment in computer networks] will overshadow them."

Thomas O'Rourke, founder and chief executive officer of Tymshare, possibly the most forward-looking and innovative independent among the top 20, agrees with Duncan: "By the 1990s, computer services will be domi-

nated by 10 or 12 giant companies."

Who are these companies struggling for a place in an industry that seems to have nowhere to go but up? In the following pages, *FORBES* examines seven of them—each with a different strategy, each with different prospects, but each doing the same thing—selling value-added software, not the hardware.

Open secrets

If I have 2,000 customers and each one has 100 people with access to my program, then 200,000 people know my 'trade secret,'" says Ernest Keet. "How can that be a secret?"

Keet has reason to ponder the problem. He is president of the software products group at Dun & Bradstreet's computer services subsidiary, National CSS, and chairman of the Association of Data Processing Service Organizations (ADAPSO) committee on software protection. As computer software mushrooms into a \$2.3 billion-a-year business, nobody really has any idea how to protect his property. "This is the first time in history that people are seeking the mass sale of intellectual property in other than printed form," says Keet.

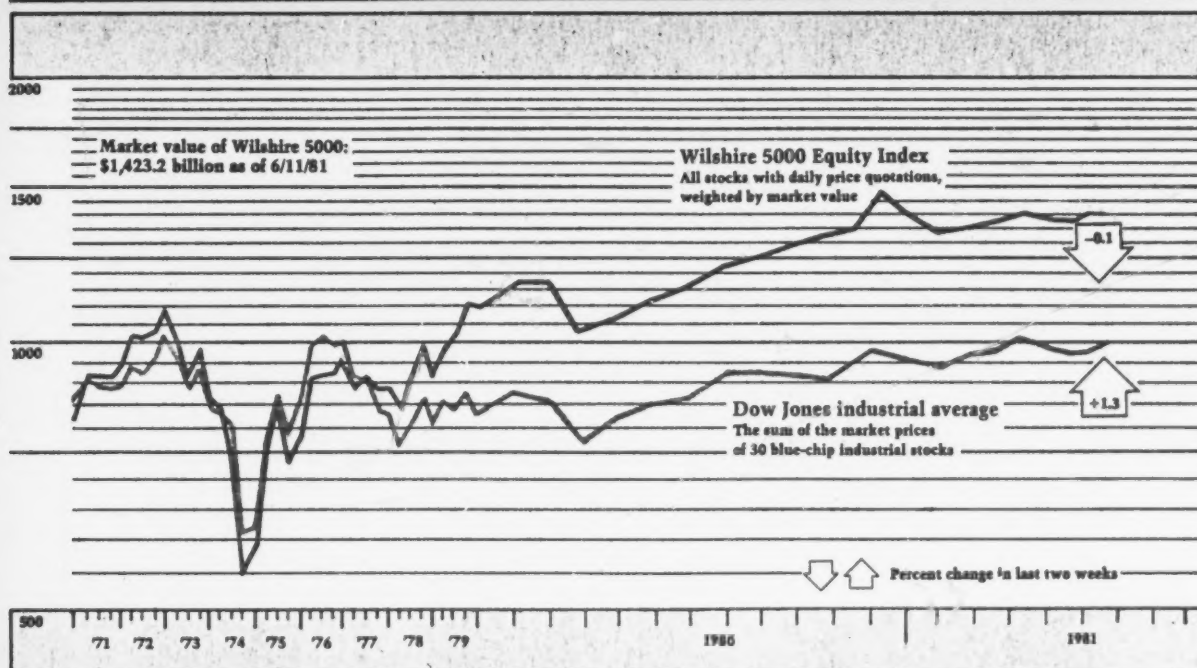
What's the answer? The patent laws? The U.S. Supreme Court has repeatedly ruled that computer programs can't be patented unless they are an essential part of a patentable (i.e., novel) product or process. Trade-secret laws? A program often is not much of a secret, as Keet points out. Copyright? "Some 80% of the value of a program is its design," he says. "You

don't have to copy line for line to steal the design concept. Copyright only protects your particular expression of the idea, not the idea itself."

There are practical defenses. Some costly software packages—priced at up to \$2 million—are sold to large corporations like Exxon or GM, where there is less danger of misappropriation, at least at the corporate level. The programs arrive on tapes or discs in "machine language," specifically addressed to the buyer's system, and difficult for a thief who doesn't have the accompanying written "documentation" to unravel or readdress to a different system. Too, copying the cheap programs available for personal computers is uneconomic unless the pirate hopes to sell many thousands of them, and so far the market isn't that big. Someday, of course, it will be.

Warns Keet, "There is a middle ground opening—large markets for software selling for a few thousand dollars to tens of thousands of small businesses. There's no known protection for that yet. It's only a matter of time before somebody opens up shop someplace and sells pirated programs like video cassettes."

The Forbes/Wilshire 5000 Review



Is Wall Street close to escape velocity? By riding a series of modest gains the market has steadily picked up altitude over the last four weeks. The Dow is again darting into the rarefied air above 1000, and there is a chance that the previous Wilshire barrier of 1467, last hit in November, could also be cracked. Indications that interest rates are falling—at least for the moment—and oil price cuts have helped the market to sustain its upward momentum. Still, the oil stocks haven't fared well, as can be seen by the depression in the ASE index, which is often dominated by oil and oil-related companies. Surprisingly, however, over the last four weeks the Dow jolted ahead 3.5%. In comparison, the Wilshire, a measure of the performance of the

entire market, is up a more modest 2.0%.

The NASDAQ index is still the 52-week champ. At the same time, the relative weakness of NYSE stocks, up only 17.8%, and to a lesser extent the ASE stocks, up 28.3%, have kept the Wilshire down to a modest 20.7% increase over the past year.

Another indication of the interest in smaller companies comes from our five key investor yardsticks. They continue to show strong upward movement in the shares of volatile, high-multiple growth companies. Issues with high volatility appreciated 72.7%—nearly 5 times as much as low-volatility stocks. And high-P/E stocks are up. That's twice the showing of their low-P/E counterparts.

Close-up On The Equity Markets

Performance of five leading indexes

Percent change	Wilshire 5000	Dow Jones Industrials	NYSE Composite	ASE Market Value Index	NASDAQ Composite
in last 4 weeks	2.0	3.5	2.1	-0.2	3.3
in last 52 weeks	20.7	15.4	17.8	28.3	43.2

Stock performance based on five key investor yardsticks

Percent change	Volatility *		P/E multiple		Dividend yield		Growth profile †		Share price	
	high	low	over 25	under 5	over 7.5%	none	high	low	over \$40	under \$4
in last 4 weeks	4.5	2.1	1.7	2.9	3.6	5.2	3.7	3.6	2.0	7.0
in last 52 weeks	72.7	17.2	65.0	31.7	10.3	60.4	61.8	26.4	26.4	65.6

* A stock's sensitivity to overall market movement. High-volatility issues have wide price fluctuations; low-volatility issues are more stable.

† A quantitative evaluation of a stock's growth image, determined by Wilshire Associates.

Note: All data for periods ending 6/11/81. Prepared by Wilshire Associates, Santa Monica, Calif.

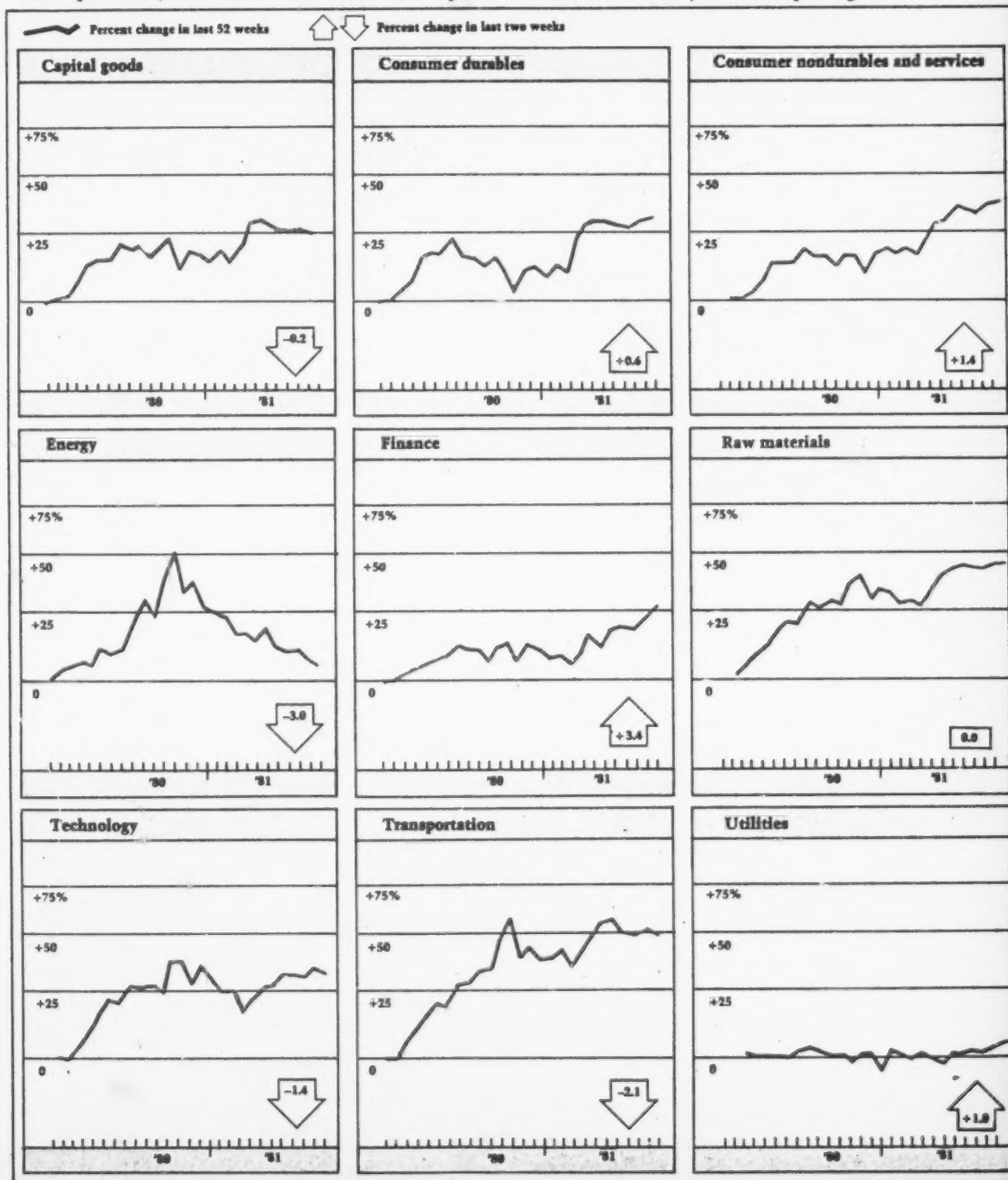
Where The Action Is

A bull market with a split personality. For the four-week period, only the energy sector actually declined, but in the last two weeks the market has been much more selective in its gains: Four of our sectors went up, four went down and one—raw materials—broke even.

The energy sector again had the biggest two-week setback, 3%. The current oil surplus is forcing more and more producers, refiners and marketers to cut prices.

Lower prices mean tighter margins and thinner profits, so investors have been pulling back from energy stocks.

Technology companies kept up their reputation for volatility. In our previous report, this sector rebounded strongly. But now it is slipping back into a slump. Finance is still strong. Both consumer durables and consumer nondurables moved ahead, but with gains that are far smaller than they have been posting.



Note: All data for periods ending 6/11/81. Prepared by Wilshire Associates, Santa Monica, Calif.

The Streetwalker

299 in 1980 to about 268 in 1981.

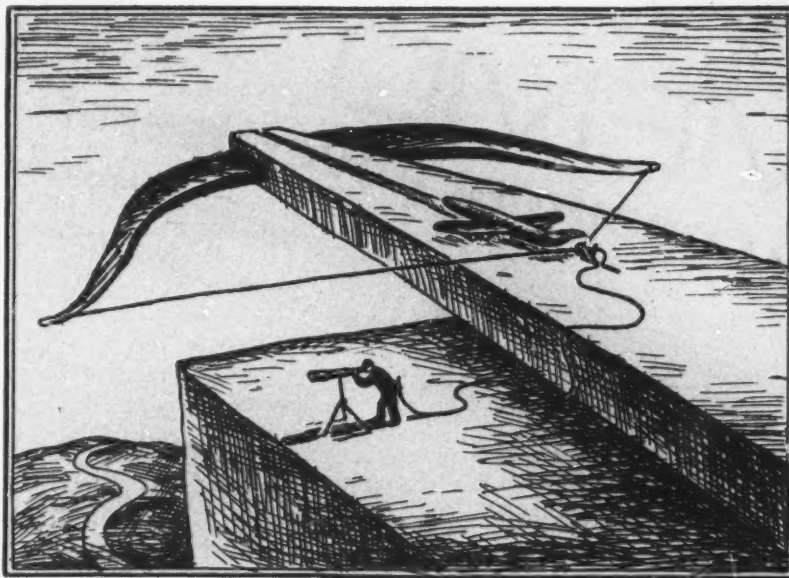
Originally, the Seattle-based company had hoped to make a smooth transition by introducing its new twin-engine 757 and 767 models at the same time it gradually phased out the popular three-engine 727. The new planes are expected to consume around 40% less fuel—but with the rise in oil prices over the past few years, order rates for the 727 declined faster than Boeing had projected. Now, deliveries of the new jets will not begin until late 1982.

So Boeing is caught in a classic squeeze: high manufacturing startup costs on the 176-passenger 757 and the 211-passenger 767 and, simultaneously, reduced demand for its bread-and-butter product, the 727.

Morton Langer, aerospace analyst at Bear, Stearns, reflects the opinion of Boeing's bears—the prevailing mood now on Wall Street. Langer starts with the decrease in orders and postponement of deliveries and adds: "There's more competition ahead from the Airbus, sales of which the governments in the Airbus consortium are willing to help finance." Despite a strong first quarter, he projects that Boeing will earn around \$5.90 a share in 1981, down 5% from last year. In 1982 he thinks earnings could possibly drop to \$4. There's more on the negative side: development costs of a 150-seat aircraft, yet another new plane. "They have to tool up for this to protect the low end of their line. They've got to go after it even if McDonnell Douglas may win."

Still, not everyone agrees. "I can't see how you can go wrong over the long term," says Stephen Leeb, editor of *Investment Strategist*. "The stock's price/earnings multiple is close to a historical low. Even though 1982 will not be a banner year, the company could still earn around \$4 a share. That's a P/E of less than 8 based on the current price."

Leeb feels that Boeing's profits should start picking up by the end of next year. "But the market will respond much sooner," he predicts. "Within a couple of months Boeing should start its upward move. If you are going to have an airline industry, then airlines are going to have to replace their obsolescent aircraft. In order for an airline to be competitive under deregulation it must have the lowest-cost product. The company has almost a captive audience. Plus, there will be a kicker from military sales, which are bound to increase



over the next couple of years."

Boeing, in fact, at bargain-basement multiples may be a lot more than just a short-term trading opportunity. The company is a clear market leader with nearly no debt and a record of steady profitability since 1948. It has a well-earned reputation for quality products and conservative accounting. What's more, Boeing's profits amounted to an enviable 26% return on net worth in 1980, and that figure should still be a respectable 20% in 1981.

Boeing reported earnings per share last year of \$6.23. Even when these figures are inflation-adjusted to reflect current costs, they still come to \$5.81 a share. This isn't a company that is cannibalizing capital for the sake of showing attractive short-term results. Although the 727 has had its moment of glory, orders for the smallest Boeing

plane, the 737, are still running quite strong. And Boeing officials expect that the 747, with its high operating efficiency, will still be a viable product through the end of the century. One reason: In this top-of-the-line market segment, Boeing has no competition.

Right now Boeing is in the midst of its heaviest production startup spending on the new 757 and 767 airliners. These costs are depressing current earnings just as many institutional investors are beginning to worry about a soft order backlog. What sort of logic has airline shares soaring while Boeing's stock price hits new lows?

It seems a bet worth making that when more efficient planes are built they'll be essential equipment in every competitive fleet. For investors who like those odds, Boeing at today's prices is a bargain.—Steve Kichen

The goldbugs are selling—should you buy?

Gold is in a tailspin and stocks in mining companies are caught in its vortex. U.S. companies saddled with relatively high costs have been especially hammered. Over the last 12 months, well-managed Homestake, for example, has dropped 18%, to a recent \$52.

Even the exceptionally efficient South African producers have been clobbered. Consolidated Gold Fields' Kloof Gold, one of South Africa's cheapest producers, has dropped by 11% since January. Western Deep Levels of Harry Oppenheimer's Anglo American group has plummeted 32%. Those declines are expressed in South African rand terms. When you factor in the rand's drop against the dollar—

15% since January, to a current 1.14 rate—then the falls look even more spectacular.

Many doomsday goldbugs—men like Gordon McLendon and James Sinclair—are now touting other investments. Are there any contrarians in the house? Well there's Michael Levinson, who runs a small firm bearing his name. A self-confessed "gold crazy" who starts his workday at 4:30 every morning on the phone to London and Johannesburg to service his clients, Levinson is rampantly bullish on the gold stocks. "I reject the view that there will be an easing of inflation," he explains.

Depending on your appetite for risk, counsels Levinson, there are ba-

The Streetwalker

sically two ways to play: Either buy the blue chips of South African gold shares that "will be paying a dividend even if gold goes to \$300." Or, if you think gold will test the stratosphere again, buy a highly leveraged "junk mine"—one which, at today's gold price, is probably uneconomic and likely to slash its dividend. Example: Loraine, an Orange Free State-based producer. Levinson says he started buying the stock heavily at 90 cents a share in 1978; it moved up steadily and reached its peak around \$11 a share in October last year and is now back to \$3 and change. These vertiginous moves, says Levinson, have come because Loraine's cost of production is around \$500 an ounce. Once gold breaks that threshold, then Loraine becomes a money machine again, possibly capable of producing and paying dividends for 30 or 35 years.

Give Levinson credit: He's kept the faith in the face of sinking gold prices, soaring interest rates and a dwindling of speculative interest. Levinson is, however, a distinct minority—more in the mainstream is Richard Young, a gold consultant for New York's Hoenig & Co. South African gold stocks? "They should be sold across the board," says Young flatly. "There will be a lot of disenchantment with gold shares in portfolios and this is the deadest game in town when no one's interested."

But Young is just a *temporary* bear. Listen: "The investment climate for South African gold shares will be grisly over the next 12 months, and to me that's delightful. I love this type of market! In about six months it'll be time to do your homework. When things are really awful, it's time to do some aggressive buying."

The way Young sees it, when the gold stocks are hot they're all hot at once. So it doesn't much matter what's in your portfolio when the market takes off. The problem is knowing when that will happen. "The best way to play these things," he explains, "is to buy the mines with the highest yields. When they go, they all go together, and I'd just as soon have a high yield along with me for the ride."

Unfortunately, South African mining companies are like any other company: They tend to cut their payouts in lean times. To minimize the chances of that happening to your stock, say the analysts, look for the companies with the lowest cost of

Buried values?

Those yields look tempting, but beware: Dividends on gold mines are nearly as volatile as the price of gold itself. And when the price of gold falls, most of those payouts are bound to be slashed. It happened last month, when the price of gold plummeted to \$460. Blyvooruitzicht—one of the high-cost producers among the big South African mines—declared a divi-

dend of \$1.15 in June, down 35% from its February payout. Nor will buying a low-cost producer guarantee dividends: East Driefontein, which produces gold for \$100 an ounce less than Blyvooruitzicht, was down 36% from its February payout. Of course, gold is not glittering as it once was and these stocks show as much: All are selling close to their 12-month lows.

Company	Annual production (thousands of ounces)	Per-ounce cost of mining	52-week price range	Recent price	F/E ratio	Dividend yield
Blyvooruitzicht	597	\$213	28 -13	14%	4.8	19.5%
East Driefontein	1,260	105	42½-22½	27%	8.3	14.4
Free State Geduld	1,090	186	92½-35½	35%	5.6	25.4
Kloof Gold Mining	995	125	52½-28	28	6.1	16.1
West Driefontein	1,572	113	106½-66½	78%	5.3	17.6
Western Deep Levels	1,470	169	80 -40%	40%	5.9	21.7
Western Holdings	940	155	115 -61	61	4.1	26.9

production. According to Julian Baring, a mining stockwatcher at London's James Capel, the most efficient major South African mines are East Driefontein (cost of production, \$105 an ounce), West Driefontein (\$113), and Kloof (\$125), all linked to the Consolidated Gold Fields group (see p. 39). Early in June two of these mines actually raised the final dividends: Kloof, for example, boosted its payout to R.4.00 (\$4.56), up 25% against a year ago in rand terms.

London mining stockbroker David Ridley of Williams de Broe is fence-sitting: He doesn't anticipate gold prices rising until U.S. interest rates fall convincingly. Short of *higher* U.S. rates, however, he doesn't think gold will be falling much more: "I think gold in the \$300 area implies a dollar-sterling rate of \$1.65, and I just don't see that."

Many of the goldbugs are hunkering down, waiting for the news bulletins from the U.S. inflation front to turn negative again. They don't like a strong dollar, 20% prime rates and a falling inflation rate.

Yet they don't believe that the new Strong America campaign will or can last. If they believed it could keep going, they wouldn't stay goldbugs. As Ian Wright of London's Laurence Prust says of strong interest rates and the surging dollar: "I personally don't think that current U.S. policy can prevail. It would ruin Western Europe's economy."

Add to this the horrendous financial condition of the nonoil-producing Third World and the IMF's inflationary bias, and Wright claims the rise of

the dollar has actually disguised the worst currency situation since 1971. He recommends buying solid, assets-in-the-ground gold mines: Camflo, Homestake and Campbell Red Lake in the U.S. and Canada; East Driefontein, Randfontein and West Driefontein in South Africa, or mining finance company Anglo American as a slower way in.

London-based gold expert Timothy Green is a consultant and writer, not a broker. With that background, he tends to look at the longer trends. "Gold in the 1970s," he says, "was just catching up to what it *hadn't* done from 1934 to 1968. Now, the price won't increase by 20 times in the 1980s. But we are moving from a situation where the world's monetary sector [i.e., the central banks] has been a net supplier of gold, to a situation where the monetary sector will be a net buyer of gold."

This fundamental shift has, says Green, already begun: In 1979, central banks were net sellers of 544 tons of gold. Last year they were net *purchasers* of 230 tons. "Gold," he predicts, "will increasingly be used in international financial flows." Even in the U.S., the idea of returning to the gold standard now sparks debate instead of derision.

What is the poor investor to make of all this? Essentially that holding gold probably makes sense as some kind of insurance against the possibility of runaway inflation but as a hot speculation it has probably had it. The time to have made real money in gold was before it turned respectable—not after.—Barbara Ellis and Barbara Rudolph

With stocks, as with most things, it's often best to buy when everyone else is selling.

Get 'em while they're down

By Steve Kichen

IN MAY OF LAST YEAR Mobile Home Industries hit a 52-week low of 15/8. A recessionary economy, high interest rates and a tight market for mortgage money, a sharp fall-off in manufactured-home sales and a weak

income statement prompted many investors to park their trailers elsewhere. In the past 12 months, however, Mobile Home Industries has more than doubled in price. Those who were willing to ride out the bad news profited handsomely.

Was the appreciation of Mobile

Statistical Spotlight

Home Industries a fluke? Or can one succeed on Wall Street by taking a contrarian approach—investing when the market is divesting? We decided to test that hypothesis. We arbitrarily selected the month of May 1980 because a period that far back in time is long enough for a stock to make a comeback. In addition, the market then was in a moderate upswing—so companies hitting new lows were missing out on Wall Street's general euphoria. New issues, recently split stock, investment companies, preferred stocks and utilities were not included in our study.

As our table below indicates, it was generally a winning proposition to invest in Big Board issues that hit 52-week lows—at least in May 1980. Of 43 stocks, 37, or 86%, showed some advance. And 25, or 58%, advanced at least 35%. In fact, a portfolio consisting of \$1,000 invested in each of these 43 stocks is now worth \$63,000.

During the same time that our port-

After the fall

In May of 1980 these 43 stocks were anything but the darlings of Wall Street. Each had fallen to a 52-week low. Since touching bottom, however, most of these issues have shown substantial price apprecia-

tion. In fact, had you invested \$1,000 in each of these shares at their low, your \$43,000 portfolio would now be worth \$63,000, a 47% gain. The moral: Sometimes it pays to buy on the bad news.

Company/principal business	Recent price	Lowest price of May 1980	% change in price	Price range 1971-81	Earnings per share latest fiscal year	Latest 12-month P/E ratio	Indicated yield
Mobile Home Ind/mfgd homes	4½	1½	176.9%	33¼- 1½	\$0.13	\$0.08	56.3
Peabody Intl/machinery	44½ ¹	17½	148.3	NA	1.66 ²	1.95 ²	NA
Keystone Cons Ind/steel & wire	17½	7¼	137.9	30¼- 7¼	d1.84	d4.36	NM
Stride Rite/footwear	26½	11½	124.5	24 - 6	2.08	2.18	12.1
Great Lakes Intl/maritime	39½	17½	118.9	46 - 3½	2.72	2.08	18.8
Palm Beach/apparel	27½	13	110.6	28½- 2	3.56	3.94	6.9
Donaldson Co/auto parts	30½	16½	90.7	33 - 4½	1.60	1.83	16.8
Mohasco/mfg carpets	13	7	85.7	48½- 7	d0.34	d0.31	NM
Dana/auto parts	32½	17½	81.8	32¼- 7	2.78	2.01	16.2
Stop & Shop Cos/grocery stores	23½	12½	81.6	24¼- 7½	3.01	3.01	7.8
Earle M. Jorgensen/steel	49½	27½	78.4	52¼- 7¼	6.29	6.81	7.3
MacMillan Bloedel/forest prods	36	20½	73.5	45¼-13½ ³	4.17	2.81	12.8
Gannett/publishing	44½	26	70.7	46 -10½	2.81	2.87	15.5
Arvin Inds/auto parts	16½	9½	69.2	29½- 4½	0.92	1.14	14.5
Kuhlman/electrical equip	12	7½	62.7	19½- 4¼	0.02	0.41	29.3
Illinois Tool Works/fasteners	32½	20½	60.5	37 -13½	3.62	3.55	9.2
Ingersoll-Rand/machinery	73½	45½	59.9	98¼-44¼	8.08	8.11	9.0
Packer-Hannifin/machinery	37½	23½	58.6	36½- 8½	3.80	3.35	11.3
Richardson Co/battery parts	20	13½	45.5	35 - 7¼	0.78	1.08	18.5
Tektronix/precision instr	60	41½	44.1	70¼- 9	4.66	4.51	13.3
Unilever Ltd ADR/consumer prods	48½	33½	43.7	53½-14	7.06	7.39	6.6
Snap-On Tools/tools	26½	18½	42.0	31½- 7½	1.92	1.92	13.9
McLouth Steel/steel	7½	5½	37.8	23¼- 5½	d10.22	d10.50	NM
CBS/broadcasting	58	42½	36.5	64¼-24¼	6.92	6.95	8.3
Transcon Lines/trucking	6½	5	35.0	25½- 4¼	0.02	d0.32	NM

¹Price includes price of one share of spunoff company, Geo International. ²Includes income from spunoff operation. ³Price range for less than ten years. ⁴Company filed for Chapter 11. Firm delisted from NYSE, now traded on the over-the-counter exchange. d: deficit. NA: Not applicable. NM: Not meaningful.

Company/principal business	Recent price	Lowest price of May 1980	% change in price	Price range 1971-81	Earnings per share latest fiscal year	Latest 12 months	Latest 12-month P/E ratio	Indicated yield
Compugraphic/phototype equip	23%	17%	34.5%	48%— 3½	\$1.72	\$0.68	35.1	—
Gould/electrical equip	25%	19%	31.8	35½— 8%	2.10	1.87	13.6	6.8%
Hayes-Albion/auto parts	9½	7½	31.0	26¼— 6%	d0.77	d1.41	NM	—
NCR/business equip	63½	51¼	22.7	81½—13%	9.51	9.57	6.6	3.5
American Family/insurance	8%	7¼	22.4	15½— 2½	1.36	1.28	6.9	6.8
Amer Broadcasting/broadcasting	31	26	19.2	47%— 7%	5.18	4.77	6.5	5.2
Allis-Chalmers/ag equipment	26%	22%	16.8	38%— 6%	3.60	3.14	8.3	7.7
Nashua/business equip	22%	20%	12.3	61%— 9	4.60	4.05	5.6	6.6
Ford Motor/automotive	23%	21%	10.1	65%—18%	d12.83	d15.12	NM	5.2
Genl Growth Prop/REIT	19	17%	10.1	47 — 8¼	12.19	0.47	40.4	2.1
Lynch Comm Sys/telecom equip	14¼	13	9.6	29½— 3	d1.36	d1.93	NM	0.7
National Steel/steel	27%	25%	6.8	52¼—23	4.42	d0.38	NM	7.3
Data Terminal Sys/computer equip	15½	16%	-5.3	49%— 4¾ ¹	d0.58	d0.58	NM	—
Intl Harvester/ag equip	18	23	-21.7	45½—15%	d12.91	d3.17	NM	—
Toro/appliances	9½	12%	-24.8	29%— 3½	0.90	d2.66	NM	—
Burroughs/business machines	42	60%	-30.4	126%—41%	1.99	1.37	30.7	6.2
Massey-Ferguson/ag equip	3¾	7	-46.4	32¼— 3¼	d10.54	d14.82	NM	—
Arctic Enterprises ⁴ /recreation equip	¾	2%	-66.7	45½— 1¼	d3.67	d5.92	NM	—

¹Price includes price of one share of spunoff company, Geo International. ²Includes income from spunoff operation. ³Price range for less than ten years. ⁴Company filed for Chapter 11. Firm delisted from NYSE, now traded on the over-the-counter exchange. d: deficit. NA: Not applicable. NM: Not meaningful.

folio racked up a 46.7% gain, other market indicators—as measured from the last trading day of May 1980—didn't do as well. The Dow Jones industrial average gained 16.9%, and the NYSE index, which, of course, includes all the stocks in our portfolio, was up only 20.6%. Our portfolio even outperformed the S&P's 500 18.6% gain and the 25% gain of the broadly based Wilshire index.

There were several big winners besides Mobile Home Industries. Keystone Consolidated Industries shot up 138%, Stride Rite ran up a 125% gain and Palm Beach moved ahead 111%. Inevitably there were a few losers. International Harvester fell 22%, Arctic Enterprises filed for Chapter 11 and declined 67%. Troubled Massey-Ferguson dropped 46%.

Still, the overall gains posted by one sample are so impressive, we decided to put together a second list, this time of stocks that have recently hit 52-week lows. We left out the same groups of stocks as last time, but in this table we also excluded energy and energy-related companies because almost all of these companies have been slumping to new lows.

John Wright, a very smart money man (see p. 181), says the stock market is wrong 95% of the time. That, of course, flies squarely in the face of perfect market theories—which claim just the opposite. But if the market never misses, how come there are so many winners among the stocks that lost big last year?

Chalk up one for Wright and others like him who think Wall Street is usually wrong. ■

Free fall

These 27 stocks have recently fallen to 52-week bottoms. Whether they will plunge even lower is anybody's guess. However, if the past is any indication of the future, at least half of these companies will be selling at substantially higher prices within a year's time. The table below lists a wide range of companies, but energy and energy-related shares have deliberately been excluded. Nearly all the energy companies have hit new lows recently.

Company/principal business	Recent low price	Price range 1971-81	Latest 12-month earnings per share
American Bakeries/bakery products	14¼	22%— 2%	\$1.16
Amer S&L (Fla)/savings & loans	13%	28%— 4¼*	d 0.35
APL/paper products	6%	17%— 2%	d 2.23
Benguet/engineering equipment	6¼	19%— 1%	1.03
Boeing/aerospace	29%	45%— 2½	6.27
Bucyrus-Erie/mining & construction equip	19	30%— 8%	2.05
Caesars World/hotels, casinos	10%	36%— ½	1.13
Callahan Mining/silver mining	18%	39%— 3%	1.61
Crown Zellerbach/forest products	38%	62%—19%	3.14
Diamond Shamrock/chemicals	27%	40 — 8¼	3.45
Diversified Inds/metal reclamation	3%	14½— 1	0.78
Fidelity Financial/savings & loans	4%	14%— 1%	d 1.07
Finl Cp of Santa Barbara/bank holding, S&L	8%	19%— 2%	d 1.37
First Mississippi/chemicals	15%	30%— ¾	0.99
Fluor/engineering & construction	33¾	71 — 3%	2.87
Growth Realty Cos/real estate	4	35 — ¾	0.75
Johns-Manville/building products	19%	46%—14%	2.24
Measurex/electrical equipment	21%	48%— 8½	1.67
No Calif S&L/savings & loans	10%	21%— 3%	0.41
Pitney Bowes/office equipment	28	40%— 6%	4.01
Publicker Inds/chemicals	4½	11%— 2	d 0.33
Revlon/cosmetics	40	59 —19%	4.72
Spectra-Physics/lasers	29%	57%— 5¼*	1.58
Sunshine Mining/silver mining	10%	26%— 2%	d 0.38
UNC Resources/uranium mines	11%	34%— 3%	1.64
Unilever NV/consumer goods	54	67¼—26¼	12.26
Williams Cos/fertilizer	27%	49%—14	5.60

*Price range for less than ten years. d: deficit.